

TECHNICAL NOTES

U.S. DEPARTMENT OF AGRICULTURE

WYOMING

SOIL CONSERVATION SERVICE

Biology No. 223

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Subject: VIOLET-GREEN SWALLOW*

General

Violet-green swallows feed entirely on insects such as bugs, flies, ants, and beetles. These birds obtain their prey while flying within open timber, over open fields or surfaces of ponds, and up and down canyon streams. On clear warm days, when insects fly high, these swallows circle at great heights overhead.

Food Requirements

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Water Requirements

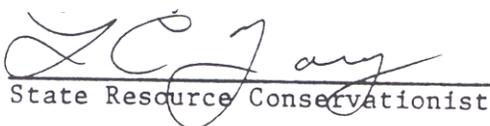
No information concerning water requirements was found in the literature.

Cover Requirements

Violet-green swallows are partial to environments near streams, lakes, or ponds in the northwestern United States. Aspen-conifer-willow and open willow riparian areas were favorable habitats for these birds in central Colorado. One study classified violet-green swallows aspen-willow and spruce-willow species.



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State Resource Conservationist

*Information taken from Ecoregion M3113 Handbook and Habitat Suitability Index Models, Wildlife Species Narratives (literature searches), U.S. Fish and Wildlife Service, various dates between 1978-1984.

Reproductive Requirements

Violet-green swallows nest throughout Colorado from 7,000 to 10,000 ft (2,134 to 3,048 m) elevation. The nests of feathers and grass are placed in natural cavities or woodpecker holes in trees or snags or in cliffs, crevices of old buildings, or bird houses. These swallows will often form colonies when nesting cavities are numerous. Nests are often located in old woodpecker holes in ponderosa pine snags and aspen. One study found that 100 percent of violet-green swallow nests in his southwestern study areas were in dead or dying trees. Another study observed that these birds nested in snags in open areas or where one side of the snag faced an opening. This species prefers to nest in forests of mature to old age classes or in old burns.

Nesting trees for violet-green swallows in the Blue Mountains of Washington and Oregon were at least 15 ft (4.6 m) tall with a minimum dbh of 10 in (25.4 cm). Nest heights in ponderosa pine in Arizona ranged from 16 to 80 ft (4.8 to 24 m) with an average nest height of 43 ft (12.9 m). Studies conducted in the southwestern United States by one researcher showed that the snag density necessary to maintain an average density (14 pairs/100 acres or 14/40 ha) of this species was 18.1 snags/100 acres (18.1/40 ha). Maintaining a maximum density of these swallows (30 pairs/100 acres or 30/40 ha) required 38.7 snags/100 acres (38.7/40 ha).

A population of violet-green swallows in Arizona declined 90 percent in a clearcut when snags were removed in the harvest. Violet-green swallows were attracted to areas which had been harvested using selective overstory removal methods and where snags remained standing.

Special Habitat Requirements

These swallows rest and sun on perches such as tops of bare branches or telephone wires.

Interspersion Requirements

Violet-green swallows are not territorial. Home range size in the Southwest averaged about 7 acres (2.8 ha).

Special Considerations

The presence and behavior of woodpeckers are limiting to the existence and numbers of secondary cavity-nesters such as the violet-green swallow.

This species is migratory, leaving Colorado by mid-September to winter in the southern U.S., Mexico, or Central America. It returns to the foothills of Colorado during spring migration.